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EXAMINER

YUEN, KAN

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2616

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/628,427	<b>Applicant(s)</b> PETERSON ET AL.	
	<b>Examiner</b> Kan Yuen	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 25-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's arguments, see remark, filed on 10/9/2007, with respect to the rejection(s) of claim(s) 1, 9, and 25 under 103 rejection have been fully considered and are persuasive. Therefore, the final rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Craig et al. (Pub No.: 2003/0108067), and Bordonaro et al. (Pub No.: 2006/0078008).

***Claim Rejections - 35 USC § 103***

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 9, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (Pub No.: 2003/0108067), in view of Bordonaro et al. (Pub No.: 2006/0078008).

For claims 1 and 9, Craig et al. disclosed the method of each of the application server process groups distinct from the signaling gateway and sharing a same prescribed point code with the signaling gateway (see paragraph 0038, lines 1-15, paragraph 0041, lines 1-10, and see fig. 4) The MASP A (272) is the first group processor which has one processor, and MASP B (272) is the second group which has one processor. Both groups are sharing the same point code PC: 5-0-0. Where the DCM is the signaling gateway; each application server process group having at least one assigned application server process sharing the prescribed point code and configured for providing services for a corresponding message signaling unit attribute, each application server process assigned to one of the application server process groups (see paragraph 0038, lines 1-15, paragraph 0041, lines 1-10, and see fig. 4) is the first group processor which has one processor, and MASP B (272) is the second group which has one processor. Both groups are sharing the same point code PC: 5-0-

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0. The groups are coupled with the LIM and DCM modules to provide application services; receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node and a destination point code specifying the prescribed point code, the SS7 message carrying a message signaling unit having specified attributes (see paragraph 0014, lines 1-17). The EOS routing node received ss7-messages comprises DPC; identifying by a signaling gateway one of the application server process groups as a candidate group for processing the message signaling unit based on a determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the specified attributes (see paragraph 0014, lines 1-17). The EOS routing node determines the message is intended for the remote application based on the SS7 signaling point code; selectively sending by a signaling gateway to the originating node a congestion notification message based on determining that an identified priority of the message signaling unit does not exceed the corresponding congestion level for the candidate group (Craig et al. see paragraph 0086, lines 1-10). When the remote level four application is unavailable, the remote level four application will send controlled message indicating congestion. However, Craig et al. did not disclose the method of determining by a signaling gateway a congestion level for each of a plurality of Voice over IP-based application server process groups receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node. Bordonaro et al. from the same or similar fields of endeavor teaches the method of determining by a signaling gateway a congestion level for each of a plurality of Voice over IP-based application server

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process groups (Bordonaro et al. see paragraph 0033, lines 1-17, paragraph 0034, lines 1-20, and fig. 1 and fig. 2). The processor 28 includes a monitoring resource 34 to determine the congestion level of groups 14a, and 14b. Wherein the processor 28 is located inside the signaling node 10. The group 14b comprises VoIP-based applications MSC1 and MSC2 for sending ISUP call setup messages; receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node (Bordonaro et al. see paragraph 0037, lines 1-15). Where the message includes OPC and DPC addresses. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Bordonaro et al. in the network of Craig et al. The motivation for using the method as taught by Bordonaro et al. in the network of Craig et al. being that it provides system reliability and QoS.

Regarding claim 25, Craig et al. disclosed the method of each application server process group distinct from the signaling gateway and sharing a same prescribed point code with the signaling gateway (see paragraph 0038, lines 1-15, paragraph 0041, lines 1-10, and see fig. 4) The MASP A (272) is the first group processor which has one processor, and MASP B (272) is the second group which has one processor. Both groups are sharing the same point code PC: 5-0-0. Where the DCM is the signaling gateway; each application server process group having at least one assigned application server process sharing the prescribed point code and configured for providing services for a corresponding message signaling unit attribute, each application server process assigned to one of the application server process groups

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(see paragraph 0038, lines 1-15, paragraph 0041, lines 1-10, and see fig. 4) is the first group processor which has one processor, and MASP B (272) is the second group which has one processor. Both groups are sharing the same point code PC: 5-0-0. The groups are coupled with the LIM and DCM modules to provide application services; a switched circuit network interface configured for receiving an SS7 message having an originating point code specifying an originating node and a destination point code specifying the prescribed point code, the SS7 message carrying a message signaling unit having specified attributes (see paragraph 0014, lines 1-17). The EOS routing node received ss7-messages comprises DPC; a routing circuit configured for identifying one of the application server process groups as a candidate group for processing the message signaling unit based on a determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the specified attributes (see paragraph 0014, lines 1-17). The DCM 350 or routing circuit determines the message is intended for the remote application based on the SS7 signaling point code; the congestion level detection circuit configured for selectively sending to the originating node a congestion notification message based on determining that an identified priority of the message signaling unit does not exceed the corresponding congestion level for the candidate group (Craig et al. see paragraph 0086, lines 1-10). When the remote level four application is unavailable, the remote level four application or the congestion level detection unit will send controlled message indicating congestion. However, Craig et al. did not disclose the method of determining by a signaling gateway a congestion level for each of a plurality of Voice over IP-based

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application server process groups receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node. Bordonaro et al. from the same or similar fields of endeavor teaches the method of determining by a signaling gateway a congestion level for each of a plurality of Voice over IP-based application server process groups (Bordonaro et al. see paragraph 0033, lines 1-17, paragraph 0034, lines 1-20, and fig. 1 and fig. 2). The processor 28 includes a monitoring resource 34 to determine the congestion level of groups 14a, and 14b. Wherein the processor 28 is located inside the signaling node 10. The group 14b comprises VoIP-based applications MSC1 and MSC2 for sending ISUP call setup messages; receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node (Bordonaro et al. see paragraph 0037, lines 1-15). Where the message includes OPC and DPC addresses. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Bordonaro et al. in the network of Craig et al. The motivation for using the method as taught by Bordonaro et al. in the network of Craig et al. being that it provides system reliability and QoS.

6. Claims 2-4, 10-12, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (Pub No.: 2003/0108067), in view of Bordonaro et al. (Pub No.: 2006/0078008), as applied to claims 1, 9, and 25 above, and further in view of Archer (Pat No.: 6747955).



For claims 2, 10, 26 Craig et al. and Bordonaro et al. disclosed all the subject matter of the claimed invention with the exception of the determining step includes determining the congestion levels for each application server process group based on a corresponding traffic configuration. Archer from the same or similar fields of endeavor teaches the use of determining step includes determining the congestion levels for each application server process group based on a corresponding traffic configuration (see column 3, lines 5-30). In the reference, the signal transfer point 16 is setup for monitoring congestion in connections between service switching points 20. The status of a link is rated from level 0 to level 3, where level 0 is no traffic, and level 3 is maximum traffic. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Craig et al. and Bordonaro et al. The motivation for using the method as taught by Archer in the network of Craig et al. and Bordonaro et al. being that it will determine a link to route the message based on the congestion level of the message.

Regarding claims 3, 11, 27 Archer also disclosed the method of for the traffic configuration for a corresponding application server process group includes an override configuration (see column 3, lines 5-30). In the reference, the level is determined based on the maximum level of 3, which is override configuration. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Craig et al. and Bordonaro et al. The motivation for using the method as taught by Archer in the network of Craig et al. and Bordonaro et al.

being that it will determine a link to route the message based on the congestion level of the message.

Regarding claim 4, 12, 28 Archer also disclosed the method of selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the override configuration (see column 3, lines 5-30). In the reference, the level is determined based on the maximum level of 3, which is override configuration. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Craig et al. and Bordonaro et al. The motivation for using the method as taught by Archer in the network of Craig et al. and Bordonaro et al. being that it will determine a link to route the message based on the congestion level of the message.

7. Claims 5-8, 13-15, 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (Pub No.: 2003/0108067), in view of Bordonaro et al. (Pub No.: 2006/0078008), as applied to claims 1, 9, and 25 above, and further in view of Delaney et al. (Pub No.: 2004/0141514).

For claims 5, 13, and 29, Craig et al. and Bordonaro et al. disclosed all the subject matter of the claimed invention with the exception of a first and second of the application server process groups are configured for providing Signalling Connection Control Part (SCCP) message service and ISDN User Part message service as the

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respective message signaling unit attributes. Delaney et al. from the same or similar fields of endeavor teaches the method of a first and second of the application server process groups are configured for providing Signalling Connection Control Part (SCCP) message service and ISDN User Part message service as the respective message signaling unit attributes (Delaney et al. See paragraph 0011, lines 8-17). Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Delaney et al. in the network of Craig et al. and Bordonaro et al. The motivation for using the method as taught by Delaney et al. in the network of Craig et al. and Bordonaro et al. being that it provides congestion control to the system.

Regarding claim 6, Delaney et al. also disclosed the method of receiving a second SS7 message having a second originating point code specifying a second originating node (See fig. 7, point 202, and 204 also M1, M2) and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes (Delaney et al. See paragraph 0043, lines 1-15);

Regarding claim 7, Delaney et al. also disclosed the method of selectively outputting to an identified one of the assigned application server processes of the candidate group the message signaling unit based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group (Delaney et al. See paragraph 0049, lines 1-18).

Regarding claim 8, Delaney et al. also disclosed the method of the selectively outputting includes identifying the identified one assigned application server process based on receiving an application server process active message from the identified

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one assigned application server process (Delaney et al. See paragraph 0049, lines 1-10). As disclosed in the reference, in response to the TFC message sent by the signaling point, any server (Fig. 8, e.g. 500, 502) can send a request message to the signaling point for alternate route.

Regarding claim 14, Delaney et al. also disclosed the method of the receiving means is configured for receiving a second SS7 message having a second originating point code specifying a second originating node (See fig. 7, point 202, and 204 also M1, M2) and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes (Delaney et al. See paragraph 0043, lines 1-15); the identifying means configured for identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second specified attributes, distinct from the portion of the specified attributes of the message signaling unit (Delaney et al. See paragraph 0035, lines 1-20) and (See fig. 6, box 420); the determining means configured for sending the second message signaling unit to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of the second message signaling unit exceeding the congestion level of the second candidate group and independent of the congestion level of the candidate group (Delaney et al. See paragraph 0047, lines 1-12).

Regarding claim 15, Delaney et al. also disclosed the method of the determining means is configured for outputting to an identified one of the assigned application server

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processes of the candidate group the message signaling unit based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group (Delaney et al. See paragraph 0049, lines 1-18).

Regarding claim 30, Delaney et al. also disclosed the method of the switched circuit network interface is configured for receiving a second SS7 message having a second originating point code specifying a second originating node (See fig. 7, point 202, and 204 also M1, M2) and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes (Delaney et al. See paragraph 0043, lines 1-15); the routing circuit configured for identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second specified attributes, distinct from the portion of the specified attributes of the message signaling unit (Delaney et al. See paragraph 0035, lines 1-20) and (See fig. 6, box 420); the congestion level detection circuit configured for causing the second message signaling unit to be sent to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of the second message signaling unit exceeding the congestion level of the second candidate group and independent of the congestion level of the candidate group (Delaney et al. See paragraph 0047, lines 1-12).

Regarding claim 31, Delaney et al. also disclosed the method of an Internet Protocol (IP) based output circuit configured for outputting the second message signaling unit to the identified active one of the application server processes (Delaney et al. See paragraph 0047, lines 1-12).

Regarding claim 32, Delaney et al. also disclosed the method of the congestion level detection circuit is configured for causing the message signaling unit to be output to an identified one of the assigned application server processes of the candidate group based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group (Delaney et al. See paragraph 0049, lines 1-18).

Regarding claim 33, Delaney et al. also disclosed the method of the congestion level detection circuit is configured for identifying the identified one assigned application server process based on receiving an application server process active message from the identified one assigned application server process (Delaney et al. See paragraph 0049, lines 1-10). As disclosed in the reference, in response to the TFC message sent by the signaling point, any server (Fig. 8, e.g. 500, 502) can send a request message to the signaling point for alternate route.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kan Yuen whose telephone number is 571-270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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